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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/528,307

03/17/2005

Hiroaki Ozeki

MAT-8654US

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EXAMINER

NGUYEN, DUC M

ART UNIT

PAPER NUMBER

2618

MAIL DATE

DELIVERY MODE

07/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/528,307	Applicant(s) OZEKI ET AL.	
	Examiner DUC M. NGUYEN	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to applicant's response filed on 6/9/08. Claims 1-2 are now pending in the present application.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable by **Mostov** (US 6,965,655).

Regarding claim 1, **Mostov** teaches a receiving apparatus, having a receiving circuit for receiving a transmitted high frequency signal, comprising an electric field strength detector for detecting the strength of an electric field (see Fig. 4 regarding ref. 63 and col. 15, lines 25-35), error ratio measuring circuit for measuring errors in received data packets (see Fig. 4 regarding ref. 63 and col. 15, lines 25-35),

operation starting point controlling circuit that varies an operation starting point of a variable gain circuit to start operation from a decreased power level which is lower than a power level used when measuring the electric field strength and errors in response to the detected electrical field strength being above a predetermined electric field threshold and the measured errors in the received data packets being above a predetermined error threshold (see Figs. 4, 8 and col. 15, lines 25-35, noting for AGC gain is reduced when RSSI is high and BER is poor, wherein it is clear that two predetermined thresholds would obviously, if not implicitly, be utilized as claimed in order for the receiver to determine whether the RSSI is high and whether the BER is poor). Further, since one skilled in the art would recognize that Mostov's teaching would be applicable to a digital receiver as well as to a TDM system and would work equally well, the claimed limitations are made obvious by Mostov.

3. Claim **2** is rejected under 35 U.S.C. 103(a) as being unpatentable by **Mostov** (US 6,965,655) in view of **Todd** (US 6,002,672).

Regarding claim 2, the claim is rejected for the same reason as set forth in claim 1 above. In addition, since utilizing polarized antennas for diversity reception is well known in the art, it would have been obvious to one skilled in the art to modify Mostov to provide a diversity feature for the receiver as well, by switching two different polarized wave antennas as suggested by **Todd** (see col. 3, lines 49-53), for utilizing advantages

of diversity of two polarized antennas in a fading/multi-path environment such as improving signal quality reception.

4. Claims **1-2** are rejected under 35 U.S.C. 103(a) as being unpatentable by **Todd** (US **6,002,672**) in view of **Mostov** et al (US **6,965,655**).

Regarding claim **1**, Todd teaches a diversity receiver wherein an antenna is selected based on RSSI and BER (see col. 6, lines 52-65), Todd also teaches the RSSI is used for automatic gain control (see col. 5, lines 52-57). Therefore, when selecting an antenna based on RSSI and BER, the switching to a new antenna would obviously changing the new RSSI value to be used for AGC, this would lead to changing the operation start point of the AGC. Therefore, selecting an antenna and changing the operation start point of an AGC would occur essentially at the same time (correlated features).

However, Todd fails to teach the adjusting of AGC gain is also based on BER quality (i.e, reduce gain when both RSSI and BER are high). However, in an analogous art, Mostov teaches the adjusting of AGC gain is based on both RSSI and BER qualities as claimed (see col. 15, lines 25-35, noting for AGC gain is reduced when RSSI is high and BER is poor). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify Todd for further utilizing the error signal quality (or BER) in combination with the RSSI to adjust the AGC gain as claimed, to account for the co-channel interference as well, for further improving the performance of the receiver.

Regarding claim **2**, the claim is rejected for the same reason as set forth in claim 1 above. In addition, it would have been obvious to provide two different polarized wave antennas as claimed, for utilizing advantages of polarized antennas in a fading/multi-path environment as suggested by Todd (see col. 3, lines 49-53).

Response to Arguments

5. Applicant's arguments with respect to claims 1-2 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

See the attached PTO-892.

7. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(571) 273-8300 (for **formal** communications intended for entry)

(571)-273-7893 (for informal or **draft** communications).

Hand-delivered responses should be brought to Customer Service Window,
Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

Application/Control Number:
10/528,307
Art Unit: 2618

Page 6

Any inquiry concerning this communication or communications from the examiner should be directed to Duc M. Nguyen whose telephone number is (571) 272-7893, Monday-Thursday (9:00 AM - 5:00 PM).

Or to Nay Maung (Supervisor) whose telephone number is (571) 272-7882.

/Duc M. Nguyen/

Primary Examiner, Art Unit 2618

July 8, 2008